

## **Timpanogos Wildlife Management Area**

### **Habitat Management Plan Summary**

**Primary purpose of WMA:** To preserve and protect crucial big game winter range and protect wintering wildlife.

**Wildlife species:** Mule deer, elk, Rocky Mountain bighorn sheep, Rio Grande turkey, cottontail rabbit, forest grouse, ring-necked pheasant, chukar, and mourning dove.

**Habitat conditions/problems:** Vegetative cover is good but lacks diversity. Cliffrose, mahogany and sagebrush have been eliminated in areas of past fires. Competition from grasses and steep, rocky slopes have prevented the establishment of browse seedlings planted on the WMA. Noxious/invasive weeds include cheatgrass, jointed goatgrass, whitetop, thistle, and toadflax. Yellow star thistle is abundant on adjacent USFS and private lands and is a threat to invade the WMA. User created roads and trails are the result of unauthorized vehicle travel.

**Access plan:** The WMA has limited motorized vehicle access due to the protection of the WMA for crucial big game winter range and as a culinary watershed for Orem and Lindon cities. In the past, vandalism on Orem City water storage facilities that are located on the WMA has been a problem. As a result, motorized vehicle travel is authorized only during the fall deer hunts on an existing 3 mile stretch of the Alta Canal Road. Vehicle access to the Alta Canal Road is via the Bonneville Shoreline Trailhead located on Orem City property. Two parking areas have been created on the WMA as well. Access by mountain bikes and motor cycles, as well as equestrians and hikers and their pets, is difficult to control because of the WMA's close proximity to the Wasatch Front. Hiking and equestrian access is located at the vehicle access point and along the Great Western, Bonneville Shoreline, and Dry Canyon trails.

**Maintenance activities (Phase 1):** Repair, install and maintain boundary fences and gates to prevent unauthorized vehicle access and development encroachment onto the WMA. Maintain existing road closures to protect habitat and minimize abuse. Maintain close relationship with Orem and Lindon cities, Utah County and USFS on road closures. Maintain parking areas to facilitate walk-in and equestrian traffic. Annual inspection for missing boundary signs, and replace as needed. Maintain a main entrance sign to identify ownership. Verify boundaries and negotiate solutions to trespass by adjacent landowners onto the WMA. Monitor and spray noxious/invasive weeds as needed. Maintain existing guzzlers.

**Habitat improvement (Phase 2):** Oak brush is the only browse species of significant quantity for big game winter forage. In order for big game to have maximum use of the area, there needs to be a greater variety and quantity of browse available over a greater proportion of the lower winter range. In order to establish a greater variety of browse species, the grass cover may have to be disturbed by mechanical or chemical treatments. Plantings may need to be done during a wetter weather cycle in order for the seedlings to establish roots deep enough to make it through dry years. Protect the WMA from fire, both human-caused and wildfires.

## **Timpanogos Wildlife Management Area Habitat Management Plan**

### **I. Background Information**

#### **Property Description**

The Timpanogos Wildlife Management Area (WMA) is a 2,397 acre parcel located in Utah County north of the mouth of Provo Canyon and east of Orem and Lindon (Appendix A, Map 1). It is bordered on the north and east by the Uinta National Forest, and on the west and south by private lands (Appendix A, Map 2). The WMA lies within the following full or partial sections: Township 5S, Range 2E, Section 36; Township 6S, Range 2E, Section 1; Township 5S, Range 3E, Sections 31, 32; and Township 6S, Range 3E, Sections 5 & 6. The legal description is found in deeds for the property (Appendix B).

#### **Encumbrances**

The mineral rights to the property were not acquired by UDWR, and there are no water rights associated with the property. Easements on the property include:

- Utility easement to Telluride Power Co. (3/21/1904) across lot 1, Sec. 1, T6S, R2E
- Utah Power and Light for flume and access (5/17/1924)
- Utah Power & Light, perpetual Utility Pole Line, Sec. 1, T6S, R2E; Sec. 6, T6S, R3E (7/28/1950) (Ref. # W-10-L; #10469)
- Alta Ditch & Canal Co. for water pipeline, Sec. 6, T6S, R2E (6/27/1956)
- Alpine Aqueduct, CUP (USA), for perpetual access road, maintenance & structures, NE1/4SE1/4, Sec. 1, T6S, R2E (5/25/78) (#78-5166), (Fed. Aid 39-L)
- Lindon City Corporation for Dry Canyon Debris Basin in NW1/4SW1/4 Sec. 36, T5S, R2E, for 5.5 acres for 30 years (began 1987, renewed 1999), (#88-1835)
- Orem City, easement for ingress, egress, & maintaining 400,000 gallon buried concrete culinary water tank in NW1/4, Sec. 1, T6S, R2E for 30 years; signed May 2, 2000 and for access to the entire length of the Alta Canal Road (#70-0348)
- Central Utah Water Conservancy District to the entire Alta Canal Road
- The Bonneville Shoreline and Great Western trails go through the west and south portions of the WMA (Appendix C, Access Management Plan travel map)

#### **Grazing**

The WMA is not grazed due to inadequate fencing, boundary issues, and because the WMA lies within the culinary watershed for Orem and Lindon cities.

#### **Land Acquisition History**

The Timpanogos WMA was purchased with Federal Aid Grant W-10-L in 1946 from co-owners J. Mac, Amanda, Fern Roundy, Clayton and Lyda Roundy and Nellie R. Greer. Eight acres were donated to the Division by Cherapple Farms in 1989. Copies of the deeds are on file at the Central

Region Office of the Utah Division of Wildlife Resources in Springville, Utah or at the main Salt Lake Office.

### **Historic Uses of the WMA**

The WMA was historically grazed by livestock, and was a popular hunting and recreation area for local residents. Hunting remains a popular activity in addition to mountain biking, horseback riding, and hiking.

### **Purpose of Division Ownership**

The Timpanogos WMA was purchased primarily to preserve and protect crucial big game winter range and wintering wildlife. The WMA is located within the Wasatch Mountains herd unit (17).

### **Key Wildlife Species on the WMA**

The WMA provides crucial big game winter range for mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), moose (*Alces alces*), and Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*). Bighorn sheep were reintroduced into the area in 2000 and 2001. This area also supports upland game such as cottontail rabbit (*Sylvilagus nuttalli*), blue grouse (*Dendragapus obscurus*), ruffed grouse (*Bonasa umbellus*), Rio Grande turkey (*Meleagris gallopavo intermedia*) (introduced into Provo Canyon in 1997-99), chukar (*Alectoris chukar*), ring-necked pheasant (*Phasianus colchicus*), California quail (*Callipepla californica*) and mourning dove (*Zenaida macroura*). Peregrine falcon (*Falco peregrinus*) and red-tailed hawk (*Buteo jamaicensis*) nest on cliff faces just south of the WMA.

### **Public Recreation Opportunities and Restrictions**

Due to its location and close proximity to heavily populated and urbanized areas, the Timpanogos WMA has limited motorized vehicle access. The WMA is surrounded on all sides by private lands and/or roadless National Forest lands managed by the Uinta-Wasatch-Cache National Forest, Pleasant Grove Ranger District. The only authorized motorized access occurs during the general deer hunting season when 3 miles of the Alta Canal Road is open to motorized vehicles via Orem City property. The access point for the Alta Canal Road is the Bonneville Shoreline Trail trailhead located north of the Orem City Cemetery and the Central Utah Water Treatment Plant. The Division negotiated this access to provide sportsmen some motorized access even if for only a limited portion of the year. Due to past vandalism of Orem City water storage facilities along the Alta Canal Road, additional access points and/or longer periods of access have not been agreed upon.

The WMA is experiencing increased OHV, equestrian, cycling, hiking, and camping use. The creation or expansion of new trails and roads by OHV's and bicycles is an on-going problem. Because this WMA was acquired to preserve crucial winter habitat for big game, the Division's objective is to provide access to the WMA while limiting trespass and minimizing the creation of unauthorized roads and trails on the WMA and adjacent National Forest lands. The Bonneville Shoreline Trail (BST) and the Great Western Trail (GWT) transect the WMA, while the Dry

Canyon Trail (DCT) enters about midway along the north boundary of the WMA. Although these trail systems provide non-motorized access to much of the WMA, equestrian and pedestrian use during winter months is a concern due to the likelihood of increased wildlife disturbance and/or harassment. Bicycling and horseback riding may need to be regulated if overuse of the WMA occurs.

Dogs may be used to locate and retrieve upland game during open hunting seasons (R657-6-25), but at all other times, dogs must be kept on a leash (R675-28). Fireworks and open fires are not allowed on the WMA due to the high wildfire potential of this area and its close proximity to heavily populated areas. Activities which are not compatible with the preservation of wintering big game and their habitats will be limited or restricted on the WMA in the future. Additional access information including the access map for the WMA can be found in the Access Management Plan found in Appendix C.

## **II. Property Inventory**

### **Existing Capital Improvements**

As part of a cooperative effort involving the Forest Service and several municipalities, the Division ripped and reseeded all of the upper trails on the WMA in 1989. Only the Alta Canal Road was left open. This road was graded and improved, and two parking areas were also constructed along the route. Lodgepole pine fencing has been placed around the parking areas to restrict access to foot or horse traffic beyond the parking areas. The end of the motorized vehicle access along the Alta Canal Road is gated. Lodgepole pine barricades and signs have been placed where unauthorized roads and trails have been closed.

Two 1,800 gallon Boss Tank guzzlers were installed at higher elevations on the WMA in 2002 to provide water sources for deer, elk, moose and bighorn sheep.

Beginning in 2002, UDWR, the Pleasant Grove Ranger District of the Uinta-Wasatch-Cache National Forest, and various sportsmen's and volunteer groups, began a cooperative effort to close unauthorized trails and roads along the foothills east of Orem, Lindon, and Pleasant Grove. As part of this effort, rock barriers and post and rail fence were installed along parts of the west boundary of the WMA to close user created roads through Division lands that extended onto the National Forest. Unauthorized roads and trails were ripped, mulched and seeded, and planted with shrub seedlings. This work will continue as necessary to control trespass and unauthorized uses on the WMA.

In 1996, the Tank Fire engulfed a large portion of the WMA, consuming 2,480 acres of wildlife habitat on Division and National Forest lands. This improved stands of old growth oak (*Quercus gambelii*) and big tooth maple (*Acer grandidentatum*) which were unavailable to big game species. Regeneration of these stands provides a greater quantity and quality of forage for big game. However, remnant stands of sagebrush and cliffrose, which are more preferred by big game, were largely destroyed by the fire. A small portion of the WMA at lower elevations was reseeded to mitigate erosion and siltation into the Provo River fishery. Two hundred and twenty-five acres were reseeded with western wheatgrass (*Agropyron smithii*), bluebunch wheatgrass

(*Agropyron spicatum*) and alfalfa (*Medicago sativa*). Alfalfa was planted as a nitrogen fixer to increase the establishment success and vigor of grasses.

From 1997-1999, thousands of cliffrose (*Cowania mexicana stansburiana*), big sagebrush (*Artemisia tridentata* spp.), rabbitbrush (*Chrysothamnus* spp.), true mountain mahogany (*Cercocarpus montanus*), curleaf mahogany (*Cercocarpus ledifolius*) and bitterbrush (*Purshia tridentata*) seedlings were planted in close proximity of the access road using boy scouts, dedicated hunters, and Division personnel.

## **Cultural Resources**

No cultural resource surveys have been done on the WMA.

## **Sensitive Species**

There are no sensitive species directly associated with this WMA. However, peregrine falcon (*Falco peregrinus*) and red-tailed hawk (*Buteo jamaicensis*) nest on cliff faces south of the WMA in the mouth of Provo Canyon.

## **Important Fish and Wildlife Habitats**

This WMA provides an abundance of habitats for a variety of wildlife species. The south and west exposures are particularly important for wintering big game species. There are approximately 500 deer and 100 elk that migrate from higher summer ranges and winter on this WMA. There is also a smaller “year round” residential herd of deer and elk which use the area. Due to increased residential development and the encroachment of homes on the east benches of Utah Valley, the Timpanogos WMA provides some of the last remaining crucial big game winter range in the area. Other wildlife species that use the management area to a lesser degree include bear, cougar, coyote, bobcat, moose and bighorn sheep. Because perennial water sources are lacking on the WMA, moose use on the WMA is limited mainly during winter months. The lack of rocky out-croppings limits bighorn sheep use mainly to migration corridors.

Upland game species are comprised of Rio Grande turkey, cottontail rabbit, forest grouse, chukar, ring-necked pheasant, quail, and mourning dove. The unit provides nesting, brooding, summering and/or wintering habitat for these species. The abundance of scrub oak and maple provides habitat for passerine and neotropical birds as well.

## **General Condition of Habitats**

### **Habitat Types**

Most of the WMA has a south to southwest aspect which retains less snow depth and cover. A large portion sits just above the historic Lake Bonneville shoreline and consists of rolling hills. The WMA has a mixture of browse, forbs and grasses. Cheatgrass and other invasive species occupy a large portion of the steeper south and west exposures due to lower site potential from shallow soils and less effective moisture. Perennial grasses and alfalfa have been seeded on the WMA as part of rehabilitation efforts following wildfires. They are abundant on the benches and

rolling hills where slopes are flat to moderate. The more desirable browse species, such as big sagebrush and cliffrose, have been almost entirely eliminated by wildfire. Competition from seeded grasses and cheatgrass is largely preventing their re-establishment. Upper elevations of the WMA are dominated by gambel oak with a mix of maple. After the summer wildfire of 1996, oak has recovered in greater densities and could become a barrier to big game as it matures.

### **Range Conditions**

There is one range trend study site located within this WMA, Orem Water Tank, #17-26. The site monitors a mixed oak-sagebrush-grass site which burned prior to site establishment in 1983, and again in 1996. The site was most recently read in 2007. In 1997, the overall condition of the range was good. The area provides an abundant but low diversity diet for big game. What little sagebrush and cliffrose that remained on the WMA was destroyed by the wildfire in 1996. Since the fire, seeded grasses and oakbrush have dominated the area. Cheatgrass has slowly increased since the 1996 fire, but with the abundance of seeded perennial grasses, it should be held in check. Trends for soil and vegetation appear stable. Protective ground cover is abundant and there is minimal soil erosion occurring at the transect location. Gambel oak is the only browse sampled on the site since 1997, and has shown little use by wildlife. Oak provides some cover but it is deciduous and provides poor winter forage.

### **Watershed Conditions**

Seeded perennial grasses cover large portions of this WMA, the results of wildfire rehabilitation efforts. Because of this, erosion is low and watershed conditions appear good. At the range trend transect location, less than 1% of the ground surface was categorized as bare soil in 2007, so soil stabilization efforts have been achieved on the portions of the WMA that consist of rolling hills. The steeper slopes along the front have less protective cover from vegetation and litter, but this is normal for this type of terrain. The main sources of erosion occur along trails that are heavily used by OHV's, bicycles, and horseback riders.

### **Habitat Limitations**

Vegetative cover is very good but lacks diversity. Both the herbaceous and browse components are dominated by only a few species. Presently, oak brush (Gamble oak) is the only browse species of significant quantity on the WMA. Attempts have been made since the fire of 1996 to improve the variety of shrubs available to big game and other wildlife species. Several seedling transplants involving sagebrush, bitterbrush, cliffrose, rabbitbrush and mahogany have been attempted in past years, however, these have been largely unsuccessful due to high competition with invasive weeds and seeded grasses and with drought conditions during the early 2000's. The plantings may need to be done during a wetter weather cycle in order for the seedlings to establish roots deep enough to make it through dry years. In order to establish a greater variety of browse species, the grass cover may have to be disturbed by mechanical or chemical treatments.



## **Human Use-Related Problems**

Law enforcement efforts are directed toward human visitation to the area. Motorized vehicle use has been prohibited on the WMA, except during the general deer hunt, when motorized vehicle access is allowed but restricted to the Alta Canal Road. Motorized access via the Alta Canal Road is monitored by Orem City and the Division. The most significant problem is associated with unauthorized OHV activity (ATV's and motorcycles). OHV's are creating numerous unauthorized trails which destroy vegetation, promote erosion on crucial winter range habitats, create sites for weed invasion, and continue to put pressure/stress on wildlife that utilize the area. The area is experiencing increased horseback riding, bicycle use, hiking, and camping as well. Depending on season of use and extent, these activities may disturb wintering big game animals. Many hikers and horseback riders are bringing unleashed dogs onto the WMA, which has the potential for increased disturbance and harassment to wildlife, especially during winter months. These activities may be limited or restricted in the future if they reach levels that are not compatible with the goals and objectives of the WMA.

## **Adjacent Land Uses and Potential Impacts**

Some of the land south of the WMA is owned by Orem City and is managed as a watershed. The Cascade Golf Center also borders the WMA on the south. Adjacent lands are extensively used by hikers, cyclists, and OHV's which have created numerous trails onto and through the WMA. Areas to the west are generally under private ownership and consist mainly of residential housing. The WMA is surrounded on the east and north by National Forest lands administered by the Uinta-Wasatch-Cache National Forest, Pleasant Grove Ranger District. National Forest lands are managed as a watershed, are not grazed by livestock, and provide critical wildlife habitats. A portion of the National Forest lands east of the WMA are managed as wilderness and have more restricted use. These forest lands provide abundant summer range for a number of big game species which migrate to the WMA for winter refuge.

Currently, housing developments along the south and west boundaries of the WMA have greatly increased human activity in the area. Urbanization has both decreased the amount of undeveloped buffer lands around the WMA and placed residential subdivisions and golf courses immediately adjacent to the WMA. The high concentration of people in close proximity to the WMA make it a target for outdoor recreation and trespass which are often incompatible with wildlife. Wintering wildlife adjacent to urbanized areas often result in conflict situations such as damage to golf course and residential landscaping.

## **III. Management Goals and Objectives**

Management of the Timpanogos WMA will take into account the goals, objectives, and strategies of other Division planning efforts. These other plans are briefly discussed below.

### **UDWR Strategic Plan (2005-2010)**

The management of the Timpanogos WMA has relevance to the following goals and objectives outlined in the Division's most current strategic plan:

*Resource Goal: Expand wildlife populations and conserve sensitive species by protecting and improving wildlife habitat.*

- *Objective R1: Protect existing wildlife habitat and improve 500,000 acres of critical habitats and watersheds throughout the state by 2010.*
- *Objective R2: Increase fish and game populations to meet management plan objectives and expand quality fishing and hunting opportunities.*
- *Objective R3: Conserve sensitive species to prevent them from being listed as threatened or endangered.*

*Constituency Goal: Achieve broad-based support for Division programs and budgets by demonstrating the value of wildlife to all citizens of Utah.*

- *Objective C2: Improve coordination with organizations, public officials, private landowners, industry, and government agencies to obtain support for Division programs.*

These goals and objectives will be achieved through a variety of measures specified in the property and habitat management sections of this plan and include development and maintenance activities, habitat improvements, access management, and fire management. Current and future partnerships and cooperative efforts will also aid the Division in addressing and reaching these goals and objectives. Examples of this are the Division's participation in local Coordinated Weed Management Area's (CWMA's) and watershed planning committees.

## **Wildlife Action Plan**

The most recent Wildlife Action Plan, also known as the Comprehensive Wildlife Conservation Strategy (CWCS), was submitted to the U.S. Fish and Wildlife Service and approved in 2005. This plan is effective until 2015 or when revisions are needed. The CWCS provides a framework for the planning, cooperation, coordination, and implementation of conservation activities throughout the state. The CWCS is composed of the following major elements:

- Approach for including the public, partners, and stakeholders; addresses the mission and authority of partners
- Outlines the effort to coordinate the CWCS with other plans
- Identifies species in greatest need of conservation and provides information about the abundance, distribution, and threats to these species
- Identifies priority habitats and discusses the problems, threats, and conservation needs for these habitats
- Discusses plans for monitoring and determining conservation success.

## **Wildlife Species Management Plans**

The Timpanogos WMA lies within the boundaries of herd unit 17, Wasatch Mountains. Mule deer and elk management plans were completed for this unit in 2006 and 2008 respectively. The management of the WMA will address the limiting factors and habitat needs identified in those plans and seek to implement habitat management strategies that are needed to reach population objectives. Revisions to these plans are typically done every 5 years, and will be incorporated into



the management of the WMA as needed.

#### **IV. Strategies for Property Management**

##### **Development Activities**

- Establish Property boundary
  - Survey along south and west borders to verify boundaries.
  - Install fencing to delineate WMA boundaries.
  - Resolve existing trespass issues with neighbors.
  - Install structures and signs to reduce and prevent vehicle trespass and damage to the WMA.
- Signage needs
  - Signs relating to harassment of wildlife, particularly relating to domestic dogs
  - Signs that identify authorized motorized vehicle routes
  - Signs that identify unauthorized trails/roads and explain closures and rehabilitation efforts
  - Boundary signs on south and west boundaries
  - Seasonal closures and fire restrictions
- Public access
  - Work with agencies and adjacent landowners to prepare access plans or agreements that enhance wildlife habitat, range conditions, escape opportunities for big game, hunting opportunities, and that reduce trespass from unauthorized vehicles. Such plans or agreements may emphasize a mix of permanent and seasonal road closures and vehicle type restrictions.

##### **Annual Maintenance Activities**

- Inspect boundaries and fences, and repair as needed to prevent unauthorized access into additional areas, especially by OHV's.
- Road maintenance/closures: Maintain existing road closures to protect habitat and minimize abuse. Maintain close relationship with Orem City on access agreement along the Alta Canal Road.
- Parking areas: Monitor and maintain parking areas including gates, signs, and fencing.
- Noxious weed control: Conduct annual weed control with chemicals along roadways for cheatgrass, Dalmatian toadflax, white top, and thistles. Monitor for yellow star thistle, which is found on adjacent Forest Service and private lands and will likely invade onto the WMA. Work cooperatively with the Utah County CWMA (Coordinated Weed Management Area) on noxious weed activities on the WMA.
- Sign replacement: Annual inspection and replacement of missing boundary signs. Maintain a main entrance sign to identify ownership; utilize additional signs for WMA restrictions and problems.
- Maintenance of water developments: Guzzlers need to be checked and cleaned annually, and repairs made as needed.

## **Zoning and Land Use Ordinances**

Utah County has designated the south part of the WMA as CE-1 (Critical Environment). The land use for the Critical Environment zone is compatible with managing the WMA for wildlife.

Lindon City has zoned section 36 (of which 480 acres are under UDWR ownership) as RMU-E (Recreational Mixed Use-East). The purpose and intent of this zone (open and generally undeveloped lands with steep slopes, reduction of public utilities on higher elevations, promotion of health, safety, convenience, order, prosperity and general welfare of the community) is generally compatible with the management of the Timpanogos WMA for preserving and protecting big game winter range. While a variety of permitted and conditional uses are allowed within this zone, that portion of the WMA zoned as RMU-E will limit or exclude these potential uses as they are not compatible with the goals and objectives of the WMA. However, issuance of conditional use permits for golf driving ranges, BMX biking tracks and facilities, general resorts, group or organized camps, even if located on nearby private lands, could affect wildlife or their habitat on the WMA.

Orem City lands that are adjacent to the west and south borders of the WMA, are zoned R12 (low density with 3.6 or fewer dwellings/acre). The lands adjacent to the southeast border of the WMA are zoned OS5 (large lot development not to exceed one dwelling/5 acre lot). Subdivisions in such close proximity to the WMA are impacting wildlife and their habitat.

## **V. Strategies for Habitat Management**

### **Unit Management Plans for Wildlife Species**

Strategies for habitat management will be consistent with those outlined in the deer and elk herd unit management plans previously mentioned which include:

- Continue to monitor the permanent range condition and trend studies located on the WMA.
- Work cooperatively to utilize grazing, prescribed burning, mechanical and other recognized vegetative manipulation techniques to enhance deer forage quantity and quality.
- Implement habitat enhancement & watershed initiative projects whenever opportunities arise.
- Cooperate with and provide input to land management planning efforts dealing with management affecting habitat security, quality, and quantity.
- Cooperate with USFS, BLM, and local governments to prepare access management plans to enhance wildlife habitats, range conditions and escape opportunities for elk. Such plans may emphasize a mix of permanent and seasonal road closures and vehicle type restrictions.

### **Habitat Improvement Plan**

Much of the Timpanogos WMA consists of west and southwest facing aspects. During winter, these slopes are often free of snow and are important wintering areas for big game animals. Recent fires have burned off much of the forb and browse species, and due to their exposure to the

sun during spring and summer, the majority of the hillsides are dry and difficult to re-vegetate. Efforts should be made to increase the diversity and abundance of browse over a greater proportion of the lower winter range in order for big game to have maximum use of the area. This should be done through browse and forb plantings, and applicable vegetation manipulation techniques to provide a mosaic of high quality habitats for game as well as non-game species. This would include planting of browse seedlings in key locations to enhance and increase preferred winter forage for big game and to optimize chances of survival for seedlings.

In the event of a wildfire, seeding of burned areas will be completed as needed. This may also include the placement of greenstrips which would assist the Division with fire prevention and suppression efforts.

Noxious weeds will be monitored annually, and when available, coordinated programs such as the Utah County Coordinated Weed Management Area (CWMA) will be utilized to take advantage of combined resources and efforts for weed control. Dedicated hunters will also be used for removal of species such as toadflax and thistle.

Existing water sources will be evaluated, and if deemed appropriate, additional water sources (ie: guzzlers) will be improved and/or developed to improve distribution and abundance of big game and other wildlife species.

### **Access Management Plan**

The Access Management Plan for the Timpanogos WMA is found in Appendix C.

### **Fire Management Plan**

All activities dealing with wild and prescribed fire will be coordinated with the Division of Forestry, Fire and State Lands (DFFSL) according to guidelines established in the Memorandum of Understanding (2005) between DWR and DFFSL. Fire management activities might include:

- When prescribed fire is needed as a habitat management tool, DWR will provide all applicable information to DFFSL to ensure burn plans are complete and submitted by deadlines.
- Due to the close proximity of heavily developed urban areas, wildfires will be aggressively battled on this WMA.
- The WMA is closed to open fires and to the use of fireworks (R657-28-4).
- As needed, greenstrips will be seeded on the WMA to reduce the threat and spread of wildfire.

### **Wood Products**

There are no available wood products on this WMA.

## **Livestock Grazing**

The Timpanogos WMA is not grazed by livestock at this time. The lack of boundary and pasture fences makes livestock grazing difficult, even as a vegetation management tool.

## **Use of Surrounding Lands**

Most of the lands adjacent to the WMA on the south and west boundaries have already been developed into subdivisions or are slated for development. The USFS and Wilderness Area protect the north and east boundaries from development.

## **VI. Summary Statement of Proposed Uses**

The primary purpose for the Timpanogos WMA is to preserve crucial big game winter range and to protect wintering wildlife. Those recreation uses of the WMA that are not compatible with the primary purpose of the WMA will be restricted and controlled.

## **VII. Monitoring and Evaluation**

The district wildlife biologist, regional habitat section, and district conservation officer will be responsible for monitoring overall effectiveness of the program. Appropriate sections will provide expertise as required. The habitat maintenance specialist will monitor the needs and effectiveness of physical facilities and improvements. Range Trend program personnel will continue to read the existing trend study site on a 5-year rotation, and will add additional monitoring sites as needed. The regional habitat section will amend the management plan as needed.

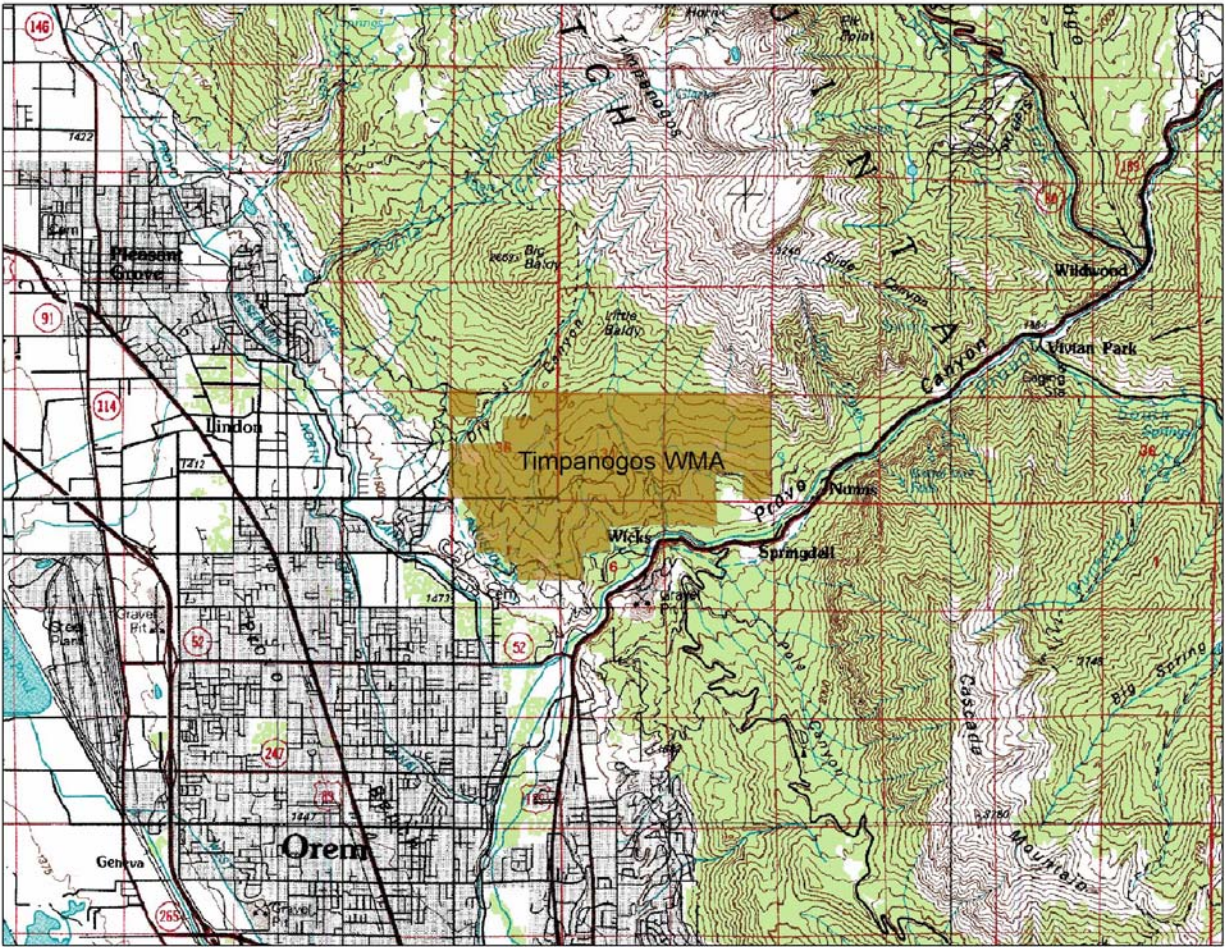
## **VIII. Appendices**

- Appendix A - Maps
  - Map 1 - General location of the Timpanogos WMA
  - Map 2 – Timpanogos WMA and surrounding land ownership
- Appendix B - Legal Description of Timpanogos WMA
- Appendix C - Access Management Plan

# Appendix A

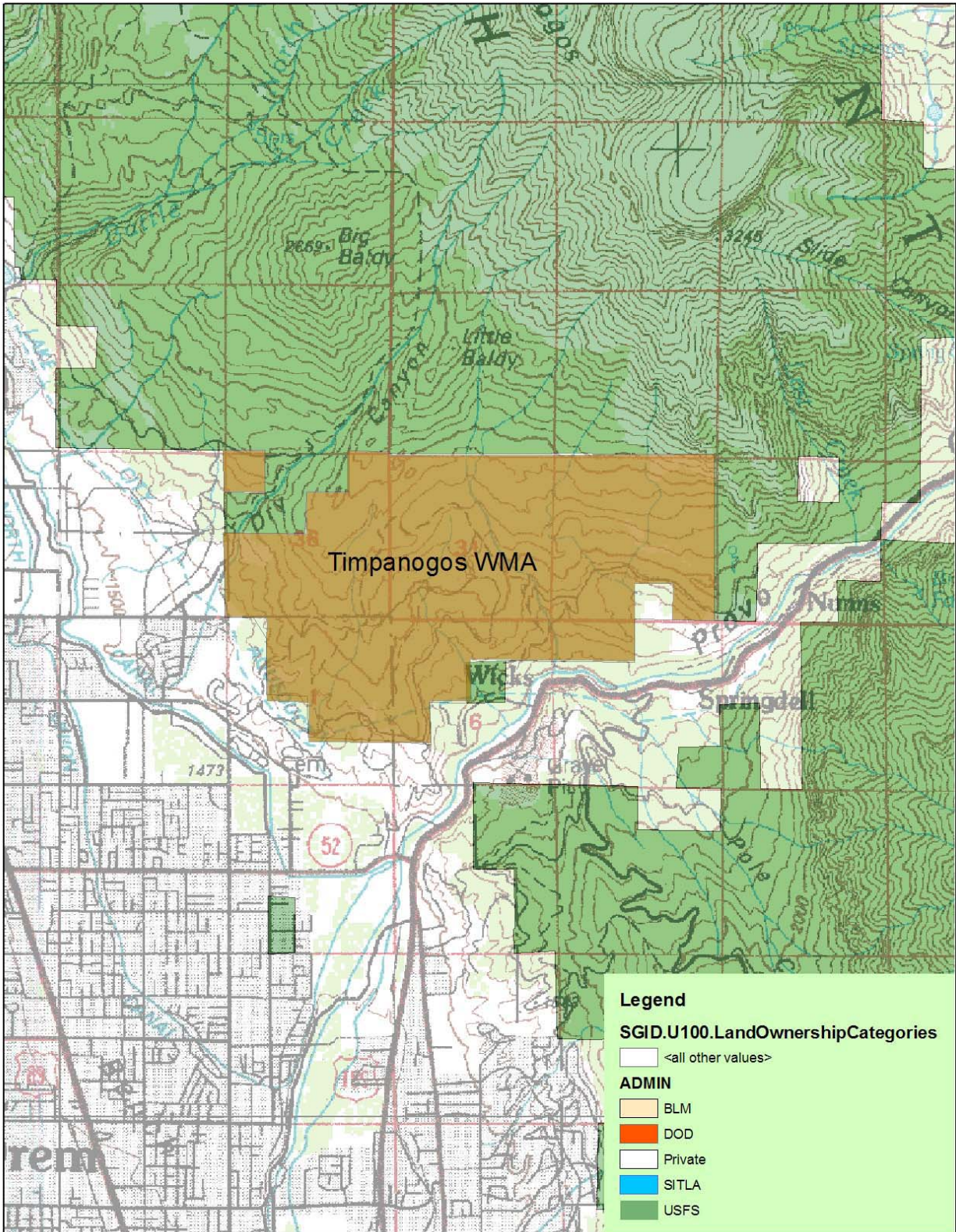
## Maps





Map 1 – General location of the Timpanogos WMA.





Map 2 – Timpanogos WMA and surrounding land ownership.

# Appendix B

## Legal Description and Encumbrances

## Legal Description of Timpanogos Wildlife Management Area

Utah County Deed No. 4320-46 (recorded April 3, 1946) (2389 acres)

Sec. 36, T5S, R2E, SLBM: Lots 1 & 4, S2NE4, E2SE4, W2SE4, SW4 (485 ac);

Sec. 31, T5S, R3E, SLBM: Entire section (637 ac);

Sec. 32, T5S, R3E, SLBM: N2, N2SE4, N2SW4, Lots 1,3 & 4 (593 ac);

Sec. 1, T6S, R2E, SLBM: Lots 1,2 &3, S2NE4, SE4NW4, N2SE4, except 12.9 acres of NE4SE4 (307 ac);

Sec. 5, T6s, R3E, SLBM: Lots 3 & 4; Sec 6, T6s, R3E, SLBM: Lots 1, 2, 4, 5, 6 & 7, SE4NW4 (367 ac).

Quit Claim Deed: Book 2655, page 152 (recorded Dec. 29, 1989)

Sec. 1, T6S, R2E, SLBM: 8 acres

Commencing at a point east 736.5 ft from the NW Corner of the NW4 of Sec. 1

thence N90.00.00E 600 ft,

thence S00.00.00E920.70 ft,

thence N41.25.55W 906.71 ft,

thence N00.00.00E 240.90 ft to the point of beginning.

# Appendix C

## Access Management Plan



# **Timpanogos Wildlife Management Area**

## **Access Management Plan**

### **Purpose**

To ensure that public use and access on the Timpanogos Wildlife Management Area (WMA) is done in a manner that assists the Utah Division of Wildlife Resources (Division) in achieving the goals and objectives outlined in the habitat management plan.

### **Background**

The Timpanogos WMA was acquired under a federal aid grant to preserve and protect big game winter range and wintering animals. Due to its close proximity to the heavily urbanized Wasatch Front, this WMA provides some of the last remaining big game winter range within Utah Valley. In addition to providing crucial habitat for wintering big game, the Timpanogos WMA is also a popular recreation area for the residents of Utah County. The access management plan will allow for public access and use of the WMA while ensuring that wildlife and habitat management objectives are reached.

### **Road Designation**

Roads are typically categorized as one of three types: Open, seasonally closed, or permanently closed.

#### *Open Roads*

These are roads that are left open year round due to agreements and/or established rights-of-way with counties, other agencies, and private landowners with inholdings to a Division property. Roads that do not occur within critical wintering areas and that do not result in habitat damage may also be left open year round.

#### *Seasonally Closed Roads*

These are roads that are closed for a portion of the year and are not on established rights-of-way or under an agreement with another entity to be left open year round. Most roads that fall within this category are closed from December 1 – April 30. The purpose of seasonally closed roads is to limit disturbance to wintering wildlife, protect sensitive and critical habitats, and to prevent excessive road damage.

#### *Permanently Closed Roads*

These are roads that serve no purpose to managing wildlife or habitat, that fragment and damage habitat, or that have been created without authorization from the Division. These roads will be closed using signs, berms, fencing, or other means. Where needed, roads

may be ripped and seeded. Others will be closed and allowed to return to their natural state.

### *Trail Systems*

Portions of the Bonneville Shoreline Trail (BST), Great Western Trail (GWT), and Dry Canyon Trail (DCT) transect the Timpanogos WMA and are popular access routes to the WMA and surrounding National Forest lands. In addition to the BST, GWT, and DCT, an extensive network of informal trails has been created by OHV's, cyclists, horseback riders, and hikers on this WMA. Some of these trails are sources of erosion and overland water flow and others fragment and degrade important wildlife habitat. The Division will inventory all trails on the WMA, and those which are found to detract from the management goals and objectives of the habitat management plan will be permanently closed in a similar manner as described above for roads.

When needed, seasonal and/or permanent road and trail closures are done under the authority of Department of Natural Resources, Division of Wildlife Resources rule R657-28.

### **Access to the WMA**

Public motorized vehicle access on the Timpanogos WMA is limited to a 3-mile section of the Alta Canal Road via Orem City property. This road begins at the trailhead to the Bonneville Shoreline Trail (BST) near the Orem City water tanks just above the Orem Cemetery. The Bonneville Shoreline Trail (BST) follows the Alta Canal Road alignment where it transects the WMA. Under agreement with Orem City, the Alta Canal Road is open to public motorized vehicular traffic during the general deer hunting season only. It is closed to public motorized vehicular traffic at all other times of the year. This road is open to motorized vehicle traffic for administrative purposes year round. The portion of this road that is open to public access during the deer hunt is bounded on both ends by locked gates. A travel map is included below which shows the location of the Alta Canal Road as well as the major trails systems that transect the WMA. The map also includes the location of gates and parking areas that occur along the Alta Canal Road. Vehicle access to Curly Springs is for administrative use only. Pedestrian and equestrian access is available on the WMA.

**All roads and trails not shown on the map as being open seasonally or year round are considered unauthorized, and the Division reserves the right to close these to all forms of access, both motorized and non-motorized.** Because the WMA borders the communities of Orem, Pleasant Grove, and Lindon, OHV use of this WMA is increasing which has resulted in the creation of many unauthorized roads and trails. Equestrian and pedestrian use of this WMA is also very high. Motorized vehicles, including OHVs, are restricted to existing and designated roads (Utah Code Section 41-22-10.1) and this policy will be enforced. Harassment of wildlife or damage to the environment, including abuse of land, watershed, or impairment of plant or animal life while operating an OHV is illegal (Utah Code Section 41-22-13), and this policy will be



enforced. The creation of new roads or trails by unauthorized motorized traffic is prohibited.

The Division reserves the right to restrict any form of access and its associated activities, both motorized and non-motorized alike, if deemed incompatible with the goals and objectives outlined in the habitat management plan.

### **Enforcement of Access Management Plan**

Enforcement of the access management plan will be carried out primarily by Division personnel, although other local law enforcement agencies will also have jurisdiction.

### **Informing the Public**

Division personnel will inform the public of the access plan by adequately signing access points, roads and trails, parking areas, and fencelines. Seasonal closures or other issues relating to access will also be included in hunting proclamations that are published annually by the Division.

The Division will work with local municipalities, the county, and other state and federal agencies to coordinate access and travel plans that are consistent with other planning efforts as long as these plans are consistent with the objectives and goals of the WMA. The access management plan will be reviewed and changes made as needed.

# Timpanogos WMA Access Map

